THE FARMER & GARDENER;

AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY I. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT $5 PER ANNUM, IN ADVANCE.

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AMERICAN FARMER,

(which is discontinued,) and is published at the same office, at five dollars per year, payable in advance.

☞When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

American Farmer Establishment.

BALTIMORE: TUESDAY, AUGUST 19, 1834.

WANTED—The numbers of the Farmer & Gardener subsequent to No. 5. Our files of these Nos. are running low, and we will thank all postmasters who have any of them lying "dead" in their offices, to return them to us.

PENNSYLVANIA HORTICULTURAL SOCIETY.

We are requested to state that the exhibition of this society, will be held in Philadelphia, on Wednesday and Thursday, the 17th and 18th of September next, and that contributions thereto are solicited of fine specimens of fruits, flowers and culinary vegetables. We heartily commend this society and its exhibition to the favorable regard of the opulent and the liberal, and to all lovers of Horticulture.

RAPE SEED OIL.—In our last number, we published an extract from the Franklin Journal, giving an account of a crop of rape seed cultivated in Salem County, N. J., which points out that article as one highly worthy of the farmer's notice.

It is there stated, that from 2½ to 3 gallons of this oil is used for every hundred pounds of wool that is manufactured into cloth; and it is known that the oil from rape seed is principally used for that purpose in the manufactories of Europe, while in this country the more expensive olive oil, we believe, is substituted in its stead.

It will shew the importance of this crop to our farmers, as well as to our woollen manufacturers, if we calculate the quantity consumed for this purpose in the United States. It has been estimated that 60,000,000 pounds of wool are annually raised in this country, and that one fourth is added to that amount (15,000,000 lbs.) by importation, making a grand total of seventy-five millions of pounds of wool, for the annual consumption. Dividing this wool into parcels of 100 pounds each, it will make 750,000 parcels, each of which will consume, we will say 2½ gallons of oil, when manufactured, making 1,875,000 galls. —divide that sum by 3½, the quantity in galls. of oil in one bushel of seed will give the quantity of seed required to produce the oil in question, 535,714 bushels—and at 22 bushels per acre, as is given in the crop referred to, would require 24,350 acres to produce it. At the price which the oil is sold for in the case given, that is, $1,30 per gall. the whole quantity consumed in the U. S. in manufacturing wool, amounts annually to $2,347,500. This appears to be an object well worth the attention of the farmer.—We will recur to it again in a future number.

POINTERS.—The following extract of a letter from a gentleman to whom was sent from the breeding farm of this Establishment, some weeks ago, a young pointer dog, is one among the many of the testimonials we have received of the excellence of the breed we possess.

AUGUSTA, GA. August 6th, 1834.

DEAR SIR.—Having recommended particularly to a sportsman and a friend of mine, the blood, breed, &c. of the pointer you sent me, he wishes to know whether you have still on hand his brother, which you mentioned, and if so, please inform me immediately, at the same time you may please consider him sold. I am so far satisfied with the dispositions of mine, but think him rather small for a dog eight months old.

He goes into the water as well as any water dog I have ever known.

MARYLAND HORTICULTURAL SOCIETY,

August 16, 1834.

Mr. Thomas Dixon presented a dozen and a half of very fine Tomatoes.

Mr. Robert Sinclair, Sen. presented a very fine, long green Cucumber, 14 inches in length.

Mr. Waters presented three varieties of Plums, of excellent quality.

Mr. John Feast exhibited a cluster of the Clintonia Rose; Vitus-agnus Castus, Chaste tree, Ilebiscus, from seed; Lobelia splendens, Convolvulus tricolor; Clemalis Virginica, Sempervivum vulgaris, Lythrum Salicaria.

Mr. Robert Sinclair exhibited a five double Althea, the tricolor.

Capt. W. P. Matthews, of Chestertown, exhibited a Garden Leek, in seed, of extraordinary size.

A number of persons, it will be recollected, were made sick by partaking of a custard at the wedding of a lady at Louisville. Poison was supposed to have been contained in them. The affair has not yet been solved. Two members of the family have come out with a detail of the facts in the papers of that place, in which they state that the custards were made by a sister. After having made one with which she was displeased, she made another, both of which were cooked in a bell metal kettle. They were made alike, and there was nothing in the composition of either but the usual ingredients. In the first, loaf sugar was used; in the second brown. The first was then put into a tin vessel, and the vessel not being sufficiently capacious to contain the whole of it, the remainder—enough, perhaps, to have filled a tea cup—was handed to a member of the family, who ate of it herself, and gave some to a servant standing near her. Neither of them was sick from the effects of it. The tin-vessel was set in the dairy-room, with ice around it, and the contents were not used until the next day, when the custard although curdled was not sour. It was then distributed at the houses of the relations of the family; and all who partook of it died or were sick. The unfortunate deceased were the mother, Mrs. Foster and child, Mrs. Fontaine, Miss Venarsdol, a child of Milton Buckner, and two negro boys.

GERMAN EMIGRANTS.—From the official returns made by the Health officer to the Board of Health, it appears that during the last three months the total number of passengers arrived in Baltimore was *four thousand four hundred and ninety one, viz:*

May,	Foreigners	847	Citizens	76,	Total	923
June	"	1618	"	135	"	1753
July	"	1744	"	71	"	1815
						4491

STEAM COMMUNICATION WITH SUEZ.—From our foreign papers we learn, (says the N Y. Mercantile Advertiser) that effectual measures have been taken to form this communication, both from Bombay and Bengal. One trip will be made each quarter of the year. It is supposed that the maximum of each *passage* will be 40 days, minimum 30 days. Steamboats will be employed.

Eggs are hatched at 104° of heat.

SPONTANEOUS COMBUSTION.—In delivering a quantity of rags from the cellar of the store, 24 Broad st., it was discovered that the mass was on fire. The rags were chiefly cotton, and oil had been spilt upon them. But for this timely discovery the store, which is large and full of goods would probably have been consumed.—*City Paper.*

THE FARMER.

AGRICULTURAL CHEMISTRY.—The first object that presents itself for the consideration of the student in the science of agriculture, is gas; which may be defined to be, *all permanently elastic fluids*, except the atmosphere.

Steam is only a mechanical division of water, the particles of which are separated by caloric, or heat; but no chemical union has in that state taken place between the particles, and as soon as the temperature is reduced the laws of affinity prevail between the separated particles, and it regains its former state of water. Not so of gas, it retains its elastic form under all degrees of temperature.

It is a fact now sufficiently ascertained, that the food of plants must be reduced into this state before it can be received into the vegetable mass. In the bowels of the earth, the manure is reduced by fermentation into a state of gas, and being mixed with the water in the soil, is then absorbed by the roots of plants, and carried into the circulation forming the sap. Different kinds of earth being discovered in the remains of vegetables, does not militate against this doctrine, for the earths and metals are likewise formed by a union of the same gases, combined with their peculiar bases, which are volatile. Clay, sand, and lime, are composed, as we shall hereafter show, by the combination of oxygen gas, with the peculiar metalic bases which form these several earths. If then we may be permitted to suppose that the matter of these several bases, which are known to be extremely volatile, are present in the circulating sap, and we do not see why that supposition may not as well be indulged in as any others that are adopted, we shall then have present all the constituent principles of the earths, in a gaseous state; and by simply obeying the laws of affinity their particles will unite and compose the different earths within the vegetable substance.

The constituent principles of vegetable matter are very simple, and are reduced principally to these three, oxygen gas, hydrogen gas, and carbonic acid gas. To these three principles merely, all vegetable substances may be reduced.

All that endless variety of appearances, which presents itself in the vegetable kingdom; the stately oak, and the tender daisy; the hardy lignum-vitæ, and the pulpy mushroom; the poisonous upas, and the healing balm; the nauseous assafœtida, and the sweet-scented rose; together with all the various colors, shades, and tints, presented to us in the flowers and foliage which cover the earth, have all been composed from the three gases we have mentioned. Not only in these different vegetables separately, do they compose such opposite substances, but from the same trunk, and from the same apparently homogenious mass of sap, are compounded substances as opposte in their qualities as any that have been mentioned:—for instance, the seed of the stupifying poppy produces an oil as bland as the olive, and it is cultivated in great quantities in France for table use; while from the milky juice extracted from its head, is produced the opium of our shops: and the delicious pulp of the peach, encloses in its kernel a poison as deadly as arsenic.

All these various results are occasioned by a slight variation in the combination of these gases.

In our next number we will endeavor to show some of the properties of oxygen in the process of vegetation.

GAMA GRASS.

ALABAMA, July 10, 1834.

To the Editor of the Farmer & Gardener:

SIR:—With much interest I read in your valuable "Farmer" of the 24th of June, a communication on the subject of the Gama Grass, from a gentleman who deservedly stands distinguished in S. Carolina as an enterprising and spirited agriculturist.—Having had the good fortune to give an impulse to the ball, I feel really gratified to see it going on successfully, receiving its farther direction from the hands of intelligence and patriotism.—Of the extraordinary value of this vegetable production, I believe there now remains no doubt; while the slight difference of opinion as to its relative value, will be productive of the happy effect of producing well conducted experiments, that must end in settling its real and intrinsic worth to the farmers and planters, especially of the southern section of the Union.

Previous to my making my first communication to the public, I confess I felt no inconsiderable degree of disagreeable anticipations. I know a little of the ignorance, and the scoffs of self-importance, so often exhibited by a class of men who appear to live for the sole purpose of treating with contempt every essay to effect a general good; who find the "summum bonum" to take care of self, and by never attempting anything, *prudently*, run no risk of failure and ridicule.

Scarcely had my first communication appeared in the "Mobile Register," when it had to encounter a most pointed rebuff, and indeed, for what appeared to me a strange reason, arrested for some time the effect of it. The difficulty of eradicating what was extremely difficult to get into existence, I could not conceive could be great, especially a plant as readily distinguished at a hundred feet distance, during the first year of its growth, as a cuckle bur, and which then can be readily plucked up by the hand.

The result of the different trials made of this grass in North and South Carolina, and in Georgia, has been to me truly gratifying; and not less the fact, that it is found contrary to my first expectations in each of those states; and I now with cheerfulness and much pleasure correct my first suggestions, that it was found only in the prairies of the south and west; and am happy to be able to state that it has been found in Alabama and Mississippi; on the river lands of the Alabama and Tombigbe, as also on the limestone formations, the prairies, &c.; and in two cases it has been found in boggy swamp land, most luxuriant. I planted it on a partially drained reed brake not sufficient for the weight of a wagon and team, and it grew well; and now I am assured a loaded wagon could pass over the spot safely. In no case, however, have I found the luxuriance of growth equal to that procured by cultivation on even pine land, manured.

I acknowledge, also, that I was alarmed at my own accounts of its production, and indeed, was only relieved by the fairly conducted trials made elsewhere, and given to the country through the medium of the public prints, in which my statements were fully sustained, although I could not help noticing that a most accurate and respectable agriculturist of the south early endeavored to check a too great luxuriance of public expectation by a modest hint that I might be found too sanguine. To all this I replied to myself, "nous verrons"—we shall see. I knew what was before me—it was not fancy with me, but fact.

Having in my possession the first, and oldest bed of this grass cultivated; and having begun early to test, by experience, its relative value, I will again repeat, that as regards its nutritious qualities, I must claim for it a higher rank than corn blades. The following experiments determine the point with me. With this grass alone and as much salt as the animals would consume, I fed two mules fourteen days, twelve of which they ginned two thousand pounds of seed cotton per day, and at the end of that period it was determined by competent judges that they had retained their flesh. They had as much as they could stand by. Now sir, I know, from a trial made through necessity, that I could not have done this with corn blades. I fed a horse of a large size for the same period on this grass, allowing eight ears of corn per day. This horse I rode daily from 5 to 15 miles—he evidently retained his flesh. I worked a pair of oxen regularly for two weeks, fed on this grass exclusively, with salt; they mended. In every case I gave as much as the animals could eat.

For the purpose of ascertaining its value in the production of *milk and butter*, two articles so essential to comfortable living, I put up two milch cows in a bare lot, and fed on it exclusively for two weeks. The milk, I am satisfied, was not as much increased as some other grasses would have effected, but I am assured that with the exception of feeding on *blue grass or white clover*, I never found milk or butter equal:—it certainly produces a rich milk. Of those four experiments I am satisfied myself. The grass fed away in making them was at thirty days growth, with the exception of that given to the cows. The first I cut from 2½ to 3½ feet high. For the milch cows I cut at fifteen days growth, 18 to 24 inches. I regret that no gentleman has yet tried the effect on *milk and butter, at fifteen days growth.* When the trial is made, let an *epicure* determine, and he will pronounce both exquisitely delicate.

AGRICOLA.

IMPORTANT TO AGRICULTURISTS—TURNIP FLY.—The turnip fly is not always of one kind, but the difference in them is not very important, for they only alter in their paint, their build is always alike. The most common is bottle green, but in some fields all are painted black, with a white line on each side from stem to stern down the neck. They are so active, that the only way in which I could ever obtain them in newly sown fields, was by sweeping the surface with a gauze net, on an iron hoop at the end of a strongish stock. They jump like fleas as they see you. This insect, or rather its grub, commences its attack on the turnip as soon as it is up, devouring the two cotyledons and the little heart, and sometimes in a few days leaving the field as brown as it was on the day it was sown. Schemes without number have been tried to get rid of or kill this little pest wherever it has appeared. I have always observed the greatest quantity of grubs on very young plants; they are very various in size, and it is not before the plants are a fortnight or three weeks old, that the beetles appear in any quantities. Yet there are some beetles observed at the first coming up of the plants. Now I know from experience, that the turnip fly feeds on wild mustard, and several other hedge plants, and therefore it is not improbable, that when they smell the fragrance of the fresh bursting cotyledons of their favorite food, they would skip down from their spring habitations, the hedges, and make the attack. I first sowed some seed in a flower pot, with earth out of my garden; it produced the animal in abundance. Secondly, I enclosed the pot with paste-board and canvass, with the same success; but still there was a possibility of the enemy getting in, as I had not the cover sufficiently close. Thirdly, I made a light frame about eight inches square, covered it with very fine silk gauze, carefully stopping the crevices of the door with pasted paper, and round the pot where the cover was fastened on with putty, so that there was no possibility of any thing coming to it from without. Yet this experiment was attended with the same success; except that one point, a negative point, was now proved, namely, that the fly did not come to the turnip from other plants, and this was a point gained. Fourthly, I baked the earth in a cast-iron pot over the fire, and used no other water to water the seed but such as I had boiled myself, applying it at the bottom of the pot with a common feeder. Then I exercised the same care, and took the same precautions as before. I did not take off the cover till the plants were of a considerable size, and I found them all a-hop with beetles. I had now made another step; having before found that the beetles did not come from other plants, it was clear that it was not in the earth or the water. Fifthly, with a lens I examined the seed and found on it a number of white flattish substances; some of the seeds were without any, but there was generally one, two, three, four, and in one instance, five, on a single seed. These I concluded were eggs, and I thought the only way left me to attack them. It would have been easy enough to poke them off with a needle, but I could not see how I was to employ a needle and a magnifying glass on a sack of turnip seed. I therefore made some pretty strong brine, and soaked the seed in it for twenty-four hours, then dried it thoroughly, and with all the precaution which I have mentioned, I sowed it again, and there was not a single fly, neither was there a single turnip injured. I tried again and again, and I found that without weakening the brine, if the seeds were only kept in it three hours, there were no beetles, but yet the seed came up as well as ever. I now practice this method with turnip seed, cabbage seed, and in fact with all the cruciform plants in common cultivation, with very satisfactory success. The whole of these experiments were made on the Swedish turnip, which is generally more infested by these beetles than any of the other sorts.—*Entomological Magazine.*

We some time ago mentioned, in regard to avoiding the attacks of the turnip fly, that a farmer completely succeeded in avoiding them for many years, by rubbing, keeping, and sowing his turnip seed among flour of sulphur. Since the turnip insect is attached to the seed, it is clear that the sulphur must have destroyed them. This attachment of the nidus of the insect to the seed is a very remarkable circumstance, and requires farther investigation than the experiments above related, to establish the fact as a general one.—*Editor of the Quarterly Journal of Agriculture.*

NANTUCKET SHEEP SHEARING.—A correspondent of the Boston Courier thus describes the late annual festival of sheep shearing on the Island of Nantucket. The number of sheep is about ten thousand, and they are all collected into a great pen at Miacomet, the site of an old Indian village, about two miles from the village of Nantucket. The sheep are all marked, and each shearer goes into the pen and selects those that bear his own mark. The village is all in a bustle, and the road to the pen is full of green one horse carts laden with passengers, going to and returning from the shearing. Tents are erected on the common near the pen, where many things, good and bad, are for sale; and where money is sheared from the pockets of the boys and others.

The writer says the fleeces average about three pounds, and that purchasers on the spot pay four shillings a pound for the wool. The Merino brings more, but there is not much of this on the island.

A NEW INVENTION.—The Taunton, Massachusetts, Whig, states that a gentleman in Boston, who owns a large chemical establishment, has discovered a new species of fire, which produces a most intense heat. It is produced by the mixture of tar and water. With this kind of fuel, a steamboat can pass the Atlantic, with the greatest safety. The discoverer declares that he can carry a steamboat from Providence to New York by using this fuel, for five dollars. It is said that the invention of the cotton gin doubled the value of every acre of land in the southern states, and we are of the opinion that the discovery above mentioned will double the value of the steam engine. It will be especially important to the engines which are employed upon rail roads, and will remove one of the greatest obstacles to the general use of locomotives upon our common roads.

THE BREEDER & MANAGER.

[From the Farmers' Series.]

THE SHORT-HORNS.—For every portion of the text in this excellent account of the short-horns, we are indebted to the Rev. Henry Berry, than whom there are few more zealous breeders of cattle, while there is no better judge of them.

Whatsoever differences of opinion may prevail respecting the comparative merits of our several breeds of cattle, it must be admitted that the short-horns present themselves to notice under circumstances of peculiar interest. Possessing in an eminent degree a combination of qualities which have generally been considered incompatible, and rendered irresistibly attractive to the eye by their splendid frames, and varied colors, it is not surprising that they have become objects of public curiosity; that they have realized for their breeders enormous sums of money; and that, throughout our own island, and in every foreign country where agriculture is attended to, they are in increasing request.

It might tend to throw much light on the science of breeding, could these animals be traced, in the progress of their improvement, to an earlier period than has hitherto been found possible. Of the extent of that improvement we may, however, form an estimate, by placing together one of the improved, and one of the unimproved race. We should, in such a case, discover resemblance just sufficient to support the belief in a very remote alliance, but there all similarity would cease.

From the earliest periods as to which we have any accounts of our breeds of cattle, the counties of Durham and York have been celebrated for their short-horns, but principally, in the first instance, on account of their reputation as extraordinary milkers.* To recite their feats at the pail would be to invite incredulity; but it may be asserted, on the best evidence, that, taken as a breed, they have never in this particular been equalled. The cattle so distinguished were always, as now, very different from the improved race. They were generally of large size, thin skinned, sleek haired, bad handlers, rather delicate in constitution, coarse in the offal, and strikingly defective in the substance of the girth in the fore quarters. As milkers, they were most excellent, but when put to fatten, as the foregoing description will indicate, were found slow feeders, producing an inferior quality of meat, not marbled or mixed as to

*Before this a large and valuable description of cattle had existed on the western coast of the continent of Europe and extending from Denmark to the confines of France.—They were celebrated for the great quantities of milk which they yielded, and some of them exhibited an extraordinary aptitude to fatten. At what particular time they found their way to England, or by whom they were imported, is unknown; but there is a tradition, that, towards the close of the seventeenth century, a bull and some cows were introduced into Holderness.

In external form, there appeared to be very little to recommend them, for they had large shoulders and coarse necks; the sides were flat, and the head was thick; all the coarse parts were bulky and the prime ones were reduced in size, and they were almost the reverse of what the agriculturist would select: they were, however, bulkier than the native breeds, and they were better milkers than the generality of the cattle of that day. They would, by dint of feeding, grow to an enormous size, but they had not the aptitude to fatten, nor the early maturity, to which they have been since indebted for their triumph over every other breed.—*Edit.*

fat and lean, and in some cases, the latter was found of a particularly dark hue. Such, also, are the unimproved short-horns of the present day, and the distinction cannot be too frequently asserted, because they are, in many cases, considered as specimens of the improved breed, and have actually been resorted to in trials as to the comparative aptitude of animals to fatten—trials which it is evident they could not successfully sustain.

A period of more than eighty years has now elapsed, since the short-horns, on the banks of the river Tees, hence called the Teeswater breed, had assumed a very different character to that contained in the foregoing description. In color they resembled the improved short-horns, being occasionally red, red and white, and roan, though the last named color was not then so prevalent as now. They possessed a fine mellow skin and flesh, good hair, and light offal, particularly wide carcasses, and fore quarters of extraordinary depth and capacity. Perhaps no closer modern resemblance can be found to the above description of the Teeswater breed than Mr. Berry's bull presents. His dam was purchased by Mr. B. on account of the very few crosses that intervened between her and some of the best of the Teeswater cattle, to which he was desirous to go back, on account of the extent to which breeding *in and in* has been carried. When slaughtered, their proof was extraordinary, and many instances are recorded of the wonderful weight of their inside fat.

The remarkable difference which existed between the Teeswater and the old unimproved short-horns may, with propriety, be ascribed to a spirit of improvement which had some time manifested itself among the breeders on the banks of the Tees, whose laudable efforts were well seconded by the very superior land in the vicinity of that river. No reasonable doubts can be entertained that they proceeded on a judicious system of crossing with other breeds, because it was utterly impossible to raise such a stock as the Teeswater from pure short-horn blood. One cross to which they referred was, in all probability, the white wild breed; and if this conjecture be well-founded, it will be apparent whence the short-horns derived a color so prevalent among them.

It is also asserted that, about the period in question, Sir William St. Quintin, of Scampston, imported bulls and cows from Holland, which were crossed with the stock of the country. It would tend to little advantage to proceed with conjectures, as to what other breeds were resorted to, if any: this much is certain, that great improvement was soon manifested, and a valuable variety established, as the two following instances will prove.

Mr. Milbank, of Barmingham, one of the leading improvers, bred and slaughtered an ox, which, at 5 years old, weighed four quarters, one hundred and fifty stones, of fourteen pounds to the stone, producing sixteen stones of tallow; and a cow bred from his stock, slaughtered by Mr. Sharter, of Chilton, at twelve years old, weighed upwards of one hundred and ten stones.

From Mr. Milbank's time, the Teeswater cattle continued to sustain their excellence and celebrity in various hands, until Mr. Charles Colling adopted them, when he manifested a superiority of skill as a breeder, which, in a very brief period, secured him an ample fortune.

Whatever had been the merits of the Teeswater cattle, it is certain Mr. Colling greatly improved them; and though it has been asserted that his success was the result of chance, arising from the possession of an animal, with the merits of which, it is supposed, he was at one period unacquainted, the writer of this article is of opinion that Mr. Colling's success resulted from a deliberate and well considered plan. He found the Teeswater, like all other extravagantly large cattle, frequently of loose make and disproportion. He was sensible, also, of the difficulty of breeding, with any thing like certainty, *large good* animals; and though he has declined on all occasions to throw any light on his views and proceedings, the writer thinks he can detect, in the very outset, and through the progress of his practice, a resolution to reduce the size of this breed, and at the same time, and by that means, to improve its form. This he is supposed to have effected, in the first instance, through the medium of a bull, called "*Hubback*," an animal respecting which there has been much controversy, principally touching the purity of his blood, a question now of little importance, because it is admitted on all hands that Mr. Colling adopted another cross, which prevails in a majority of superior short-horns of the present day. It may, notwithstanding, be matter of interest to state a few particulars respecting this bull.

Without entering on an inquiry by what circumstances Hubback's title to be considered of pure blood is supported or weakened, it may suffice to observe, that it appears probable he possessed on one side the imported blood. The possessor of his dam was a person in indigent circumstances, and grazed his cow in the highways. When afterwards she was removed to good land, near Darlington, she became so fat that she did not again breed; and her son, having the same feeding propensity in a high degree, was useful as a bull during a very short period. The quality of his flesh, hide, and hair, are supposed to have been seldom equalled; and as he was smaller than the Teeswater cattle, he was eminently calculated to forward Mr. Colling's views.

It has been remarked that we have at present no superior horse on the turf, which does not boast the blood of the Godolphin Arabian; so it may be asserted that we have no superior short-horns which do not claim descent nearly, or remotely, from Hubback.*

* This is true, because Hubback was the sire of the dam of Mr. Charles Colling's bull, Foljambe, who was the grandsire of Favorite; and there can be no doubt that there has not been for many years any superior short-horn who was not descended from Favorite. Mr. Charles Colling is said to have considered that the bull, Foljambe, was the one who did his stock the greatest good; and this is not improbable, as Foljambe was the sire both of the sire and dam of Favorite. Hubback, however, must have been a remarkably good animal, and considering the short time during which he was used as a bull, proved himself a first rate stock getter. The following account of Hubback we had from Mr. Waistell, of Alihill, who, although his name does not appear conspicuously in the 'Short-horned Herd Book,' deserves much credit for his discrimination here. He used to admire this calf as he rode almost daily by the meadow in which it grazed; and at length he attempted to purchase it from the owner. The price asked, £8, seemed much for a calf not a year old; and the reputation of the short-horns not being yet established, the bargain was not struck. Still he longed for the young beast; and happening to meet Mr. Robert Colling near the place, he asked his opinion of the animal. Mr. Colling acknowledged that there were some good points about him; but there was something in his manner of acknowledging this, which induced Mr. Waistell to suspect that Mr. Colling thought somewhat more highly of the calf than his language expressed, and therefore, he hastened the next morning, concluded the bargain, and paid the money. He had scarcely done so before Mr. R. Colling arrived for the same purpose, and as the two farmers rode home together, they agreed that it should be a joint speculation.

Some months passed by, and either Mr. Waistell's admiration of the calf a little cooled, or his partner did not express himself very warmly about the excellence of the animal, and Messrs. Waistell and R. Colling transferred young Hubback to Mr. C. Colling; who, with the quick eye of an experienced breeder, saw the value of the little beast. Mr. Waistell expressed to us (October, 1823) his regret (natural enough) at having been induced to part with the sire of the short-horns, and his extreme disappointment that when Hubback began to cover, Mr. Charles Colling confined him to his own stock, and would not let him serve even one of Mr. Waistell's cows.—*Edit.*

After the use of this bull, Mr. Charles Colling proceeded with singular success to produce, from time to time, superior animals; and the number of bulls he disposed of by letting was highly encouraging. But the circumstance which brought the improved short-horns into most extensive notice was the production of the "Durham Ox," an animal which speaks volumes in favor of even a single cross of this blood; for the ox was the produce of a common cow, which had been put to "*Favorite*." At five years old, the Durham ox was sold to Mr. Bulmer, of Harmby, near Bedale, for public exhibition, at the price of £140: this was in February, 1801. He was at that time computed to weigh 168 stones, of 14 lb., his live weight being 216 stones; and this extraordinary weight did not arise from his superior size, but from the excessive ripeness of his points. Mr. Bulmer having obtained a carriage for his conveyance, travelled with him five weeks, and then sold him and the carriage, at Rotherham, to Mr. John Day, on the 14th May, 1801, for £250.

	£
On the 14th of May, Mr. Day could have sold him for	525
On the 13th of June, for	1000
On the 8th of July, for	2000

Mr. Day travelled with him nearly six years, through the principal parts of England and Scotland, till at Oxford, on the 19th February, 1807, the ox dislocated his hip bone, and continued in

that state till the 15th April, when he was obliged to be slaughtered, and, notwithstanding he must have lost considerably in weight, during these eight weeks of illness, his carcase weighed,

	Imp.-stones.	lbs.
Four quarters,	165	12
Tallow,	11	2
Hide,	10	2

This was his weight at eleven years old, under all the disadvantages of travelling in a jolting carriage, and eight weeks of painful illness. Had he been kept quietly at Ketton, and fed till seven years old, there is little doubt but he would have weighed more than he did at ten years old, at which age Mr. Day stated his live weight to have been nearly thirty-four hundred weight, or two hundred and seventy stones, from which if fifty be taken for offal, it leaves the weight of the carcase two hundred and twenty stones.

It is a well ascertained fact, that, during his career as a breeder, Mr. Colling tried several experiments in crossing, and the breeds to which he resorted on these occasions, being very considerably smaller than the short-horns, this circumstance tends to corroborate the writer's opinion that he considered it desirable to reduce their size. The cross with the Kyloe led to no results worthy enumeration, but that with the *polled galloway* must not be passed over without comment. Before stating the circumstances attending this experiment. it may be proper to observe that no breed of cattle promised so successful a cross with the short-horns as the galloway. They were calculated, by their deep massive frames and short legs to bring the short-horns nearer the ground, and to dispose their weight in a more compact manner: their hardy habits would be essentially useful, and the quality of their flesh and hair were such as to render the experiment still more safe. Add to this, that they could be obtained of a red color, and we are prepared to admit, even without the sanction of a successful experiment, that they were admirably adapted to cross with the short-horn, standing frequently too high from the ground, not very well ribbed home, and not seldom of loose, disjointed frame.

To this breed Mr. Colling resolved to resort; and though at the time when he did so, the event was regarded with some degree of ridicule by the pure blood advocates, and comments passed which would have deterred ordinary men from the exercise of their judgment, Mr. Colling persisted.

He was much favored by circumstances in promoting his object, which was to take one cross, and then breed back to the short-horn,—the only course, by the way, in which crossing can be successfully adopted. To breed from the produce of a cross *directly among themselves* will lead to the results which have induced many persons, without due consideration, to believe conclusive against crossing; but to take one cross, and then return and adhere to one breed, will, in the course of a few generations, be found to stamp a variety with sufficient certainty.

Mr. Colling's short-horned bull *Bolingbroke* was put to a beautiful red polled Galloway cow, and the produce, being a bull calf, was, in due time, put to *Johanna*, a pure short-horn—she also producing a bull calf. This grandson of Bolingbroke was the sire of the cow *Lady*, by another pure short-horned dam, and from Lady has sprung the highly valuable family of improved short-horns, termed, in reproach, the *alloy*. How far the alloy was derogatory, let *facts* testify.*

It will probably be admitted that the prejudice against this cross was at the highest at the time of Mr. Charles Colling's sale. The blood had then been little, if at all, introduced to other stocks, and it was manifestly the interest, whatever might be the inclination, of the many breeders who had it not, to assume high ground for the pure blood, and to depreciate the alloy. Under these untoward circumstances for the alloy, what said public opinion, unequivocally certified by the stroke of the auctioneer's hammer? *Lady*, before mentioned, at fourteen years old, sold for two hundred and six guineas. *Countess*, her daughter, nine years old, for four hundred guineas. *Laura*, another daughter, four years old, for two hundred and ten guineas. *Major* and *George*, two of her sons, the former three years old, the latter a calf, for two hundred guineas, and one hundred and thirty; besides a number of others, more remotely descended from Lady, which all sold at high prices; in fact, in a sale of forty-eight lots, realizing £7115 17*s*. Lady and her descendants sold for a larger sum than any other family obtained.

The whole particulars of this first grand sale of short-horn stock ought to be preserved. We extract it from Mr. Bailey's Survey of Durham.

A CATALOGUE

Of Mr. C. Colling's Sale of Improved Short-Horned Cattle, October 11th, 1810.

COWS.

Names.	Out of	Got by	Cows' Age.	Bulled by	Sold for Gs.
Cherry,	Old Cherry,	Favorite,	11,	Comet,	88;
Kate,	Comet,	4, Mayduke,	35;		
Peeress,	Cherry,	Favorite,	5,	Comet,	170;
Countess,	Lady,	Cupid,	9,	Comet,	400;
Celina,	Countess,	Favorite,	5,	Petrarch,	200;
Johanna,	Johanna,	Favorite,	4,	Petrarch,	130;
Lady,	Old Phœnix,	a grandson of Lord Bolingbroke,	14,	Comet,	206;
Cathelene,	a daughter of the dam of Phœnix,	Washington,	8,	Comet,	150;
Laura,	Lady,	Favorite,	4,	Comet,	210;

bought by Major Rudd, Marton, Yorkshire.

bought by J. D. Nesham, Esq. Houghton-le-Spring, Durham.

bought by Mr. Hunt, Morton, Durham.

bought by Major Rudd, Marton, Yorkshire.

bought by Major Rudd, Marton, Yorkshire.

bought by Sir H. Ibbetson, Bart., Denton Park, Yorkshire.

bought by H. Witham, Esq. Cliff Hall, Yorkshire.

C. Wright, Esq., Cleasby, Yorkshire.

bought by G. Parker, Esq. near Malton, Yorkshire.

bought by Mr. Grant, Wyham.

Lily, Daisy, Comet, 3, Mayduke, 410; bought by Major Rudd, Lincolnshire.

Daisy, Old Daisy, a grandson of Favorite, 6, Comet, 140; bought by Major Bower, Welham, Yorkshire.

Cora, Countess, Favorite, 4, Petrarch, 70; bought by G. Johnson, Esq. near Scarborough.

Beauty, Miss Washington, Marsh, 4, Comet, 120; bought by C. Wright, Esq.

Red Rose, Eliza, Comet, 4, Mayduke, 45; bought by W. C. Fenton, Esq., near Doncaster.

Flora, ———, Comet, 3, Mayduke, 70; bought by Earl of Lonsdale.

Miss Peggy, ——— a son of Favorite, 3, Comet, 60; bought by O. Gascoigne, Esq., Parington, Yorkshire.

Magdalene, a heifer by Washington, Comet, 3, Comet, 170; bought by —— Champion, Esq. Blyth, Notts.—2669 Guineas.

BULLS.

Names.	Age.	Out of	Got by	Price. Gs.	Bought by
Comet,	6,	Phœnix,	Favorite,	1000;	bought by Messrs. Wetherill, Trotter, Wright, and Charge, near Darlington.
Yarborough,	9,	Favorite,		55;	bought by A. Gregson, Esq., Lowlinn, Northumberland.
Major,	3,	Lady,	Comet,	200;	bought by Mr. Grant, Wyham.
Mayduke,	3,	Cherry,	Comet,	145;	bought by—— Smithson, Esq.
Petrarch,	2,	Old Venus,	Comet,	365;	bought by Major Rudd.
Northumberland,	2,	——,	Favorite,	80;	bought by Mr. Buston, Coatham, Durham.
Alfred,	1,	Venus,	Comet,	110;	bought by Mr. Robinson, Acklam, Yorkshire.
Duke,	1,	Duchess,	Comet,	105;	bought by A. Compton, Esq. Carham, Northumberland.
Alexander,	1,	Cora,	Comet,	63;	bought by Mr. Fenton.
Ossian,	1,	Magdalene,	Favorite,	76;	bought by Earl of Lonsdale.
Harold,	1,	Red Rose,	Windsor,	50;	bought by Sir C. Loraine, Northumberland.—2249 Guineas.

BULL CALVES, UNDER ONE YEAR OLD.

Names.	Out of	Got by	Price. Gs.	Bought by
Ketton,	Cherry,	Comet,	50;	bought by Major Bower.
Young Favorite,	Countess,	Comet,	140;	bought by —— Skipworth, Esq. Lincolnshire.
Geerse,	Lady,	Comet,	130;	bought by ——Walker, Esq. Rotherham.
Sir Dimple,	Daisy,	Comet,	90;	bought by T. Lax, Esq. Ravensworth.
Narcissus,	Flora,	Comet,	15;	bought by Mr. Wright.
Albion,	Beauty,	Comet,	60;	bought by T. Booth, Esq. Catterick.
Cecil,	Peeress,	Comet,	170;	bought by H. Strickland, Esq. Boynton, Yorkshire.—655 Guineas.

HEIFERS.

Names.	Age.	Out of	Got by	Price. Gs.
Phœbe,	3,	Dam by Favorite,	Comet,	105; bought by Sir H. Ibbetson.
Young Duchess,	2,	dam by Favorite,	Comet,	183; bought by T. Bates, Esq. Halton Castle, Northumberland.

* The dam of Lady was also the dam of the bull Favorite; and as the grandson of Bolingbroke is not known to have been the sire of any other remarkably good animal, it is most probable that the unquestionable merit of Lady and her descendants is to be attributed more to her dam than to her sire.—*Edit.*

Young Laura, 3, Laura, Comet, 101; bought by Earl of Lonsdale.

Young Countess, 2, Countess, Comet, 206; bought by Sir H. Ibbetson.

Lucy, 2, Dam by Washington, Comet, 132; bought by Mr. Wright.

Charlotte, 1, Cathelene, Comet, 126; bought by Mr. R. Colling.

Johanna, 1, Johanna, Comet, 35; bought G. Johnson, Esq.—808 Guineas.

HEIFER CALVES, UNDER ONE YEAR OLD.

Names.	Out of	Got by	Price. Gs.	Bought by
Lucilla,	Laura,	Comet,	106;	bought by Mr. Grant.
Calista,	Cora,	Comet,	50;	bought by Sir H. V. Tempest, Bart, Winyard, Durham.
White Rose,	Lily,	Yarbro',	75;	bought by Mr. Strickland.
Ruby,	Red Rose,	Yarboro,	50;	bought by Major Bower.
Cowslip,	——	Comet,	25;	bought by Earl of Lonsdale.—306 Guineas.

[From the London Lancet.]

Lectures on Veterinary Medicine,

Delivered in the University of London, by Mr. Youatt.

LECTURE III.—(CONTINUED.)

The Turbinated Bones.—Below the æthmoid are the two turbinated bones. *The superior turbinated bone* in the *horse* seems to be almost a continuance of the æthmoid. It is oblong and convoluted, and thence its name, turbinated or turban-shaped. The French call these bones *cornets*, from their convolutions. It presents a labyrinth of cavities, divided into cells by curious thin septa, and all of them communicating with each other; and the parietes being thin, porous, elastic, in the living animal, and exceedingly brittle in the dead one.

It is so placed as to form a division between the nasal cavity and the maxillary sinuses. It is that which renders them separate cavities, and there is a communication between, as I have stated, under the valve-like structure of the prolongation of the lower cell of the æthmoid bone.

In *oxen* the superior turbinated bone is small and simple, and is almost destitute of convolutions. It is evidently merely supplementary to the æthmoid, and its functions is diminished and rendered unnecessary by the development of that bone. This is more particularly so in the *dog*, where the turbinated bones are reduced to utter insignificance by the bulk of the æthmoid.

The *inferior Turbinated Bone* in the *Horse* is more porous than the superior one; it is also more convoluted, and the convolutions are not a little complicated. The gause-like structure of this bone is worthy of notice, and also the different manner in which the two cornets are convoluted; the upper portion of the superior bone being most closely attached to the walls of the cavity, and the lower border lying comparatively loose;—the reverse taking place with the lower turbinator. The inferior turbinator lies along the superior maxillary, below its union with the nasal. Neither of them can be separated from the bony parietes of the cavity by maceration, but they are too readily broken off in our dry preparations. A prolongation of the lower turbinator extends over the inner ala of the false nostril, and may be readily seen by lifting the nostril. It has, sometimes, been mistaken for morbid tumour, or minute polypus. The hollow pedicle which runs down thus far has no outlet, but seems designed to give support to the inner ala of the false nostril. Comparative anatomists speak of the connexion between the two turbinated bones, but I have never been able satisfactorily to trace it.

In the *Ruminants*, the inferior turbinated bone is more developed, and particularly in the *sheep*, so as to fill up, as it were, the whole of the cavity, accounting for the readiness with which that animal is *blown* when he is a little hurried. In the *dog* this bone is very small, but is curiously complicated. We need in him both speed and scent; this bone is also unsually convoluted, and the nasal cavity is left more open.

The Meatus—You will perceive that these bones form the cavity into three distinct meatuses or channels; the superior one lies between the superior turbinated one and the nasal bone, constituting the roof of the cavity, and it even extends above, and by the side of the æthmoid bone, to the cribriform plate, and it is closed at its superior termination. It is defended from the access of the external air, or at least from any violent current of air, by the development of the false nostril at its lower part. It is an interposed space to defend the æthmoid bones from injury if the nasals should be fractured; and the air, loitering as it were in it, and being longer in contact with the sensitive membrane by which it is lined, contributes to the acuter sense of smell. It is the portion of the cavity more particularly devoted to the sense of smell. You will not forget the use you may make of it in fracture of the nasals; an elevator may be introduced below, or the trephine may be applied through its whole extent.

The central meatus lies between the two turbinated bones. It receives every natural or morbid discharge from the maxillary and other sinuses, for there is a valve-like opening into these sinuses, two-thirds of the way up the meatus, and under the superior turbinated bone. There is only one spot, pointed out to you by these preparations, at which the trephine could possibly be applied.

The largest channel is along the floor of the nasal cavity, under the inferior turbinator, and extending from the anterior to the posterior termination of the cavity. It is the proper air passage; and because it has this important function it is out of the reach of any injury or violence, and is not clogged by any discharges but those that proceed from the respiratory tubes beyond the nostril, or an exceedingly unfrequent regurgitation of matter from the stomach. The distinct offices of these channels, and their different construction, admirably adapted for the performance of each, deserve your attention.

The Maxillary and other Sinuses.—When the superior turbinated bone is removed, the maxillary sinus, of which I shall have to speak under another system, is exposed, or rather becomes a portion of the nasal cavity. With the maxillary sinuses, the frontal, the superior æthmoidal, and the sphenoidal in the horse, and in the ox, the palatine cells communicate. Altogether they form a vast hollow, and, under some diseases, and particularly under glanders, contain a great quantity of purulent or other fluid. The maxillary sinus freely communicates with the others, and it opens into the nasal cavity under the superior turbinated bone.

The Lachrymal Duct.—This is the channel through which the superfluous tears are conveyed to the lower part of the nostril, and is exposed to view when the superior turbinated bone is removed. There is, behind the tubercle on the lachrymal bone, varying in size in our different patients, and which will be more particularly described when we treat of the age, a funnel-shaped depression, into which the superfluous fluid of the eye is received through the puncta on either side of the caruncle. I will not detain you by entering into the dispute whether the membrane by which this funnel is lined is a proper sac, but it is at least an enlargement of, or the most capacious part of the lachrymal duct, and to a person possessed of common eyesight it is plainly enough a sac.

A long canal here commences, and runs down the lachrymal, and along the maxillary bone, very small, and with difficulty admitting any probe. Passing over the maxillary it takes a direction a little superiorly, so that it must not only be a small but a flexible probe to pass through it. About an inch and a half down the maxillary, and not more than half an inch from the foramen infra orbitarium posteriorly, and a little superiorly, it enlarges, and becomes membranous, and is continued downward until it terminates on the inner and inferior part of the nostril, below the proper lining of the nostril and on the cuticle. It terminates on the cuticle, that the highly sensitive membrane of the nose may not be excoriated by the tears, occasionally rendered acrimonious, in inflammation of the eye. The oval termination of this duct is easily brought into view by lifting the nostril.

We shall have, by-and-by, to speak of a disease, which is characterised, in its later stages at least, by ulceration of the Schneiderian membrane, and ulcers of a chancrous nature assuming a definite rounding or oval form. Take care that you do not mistake this for one of them, or pronounce a healthy horse to be glandered, because, for the first time, you happen to observe the termination of this duct. It is a mistake that has been made by many a good horseman, and even by some veterinary surgeons. A little while ago I was sent for in great haste by the coachman of one of our four-in-hand gentlemen. I found him in sad tribulation; one of his master's best horses was glandered, and the disease would run through the whole team. It was the first time that this aperture had attracted the attention of a man who would not have yielded to any one in pretension to horse knowledge. I know one of *your* brethren who would otherwise have passed a very good examination, but he happened, unfortunately, to say that the nasal duct opened on the Schneiderian membrane, and he was turned back on this point of practice.

NOT AT HOME.—Some strangers being on a visit to Gloucester, Mass. recently called at the house of Mr. Penn, a gentleman at the age of one hundred and two, to pay their respects. He was not at home, but at work in his corn field, a mile distant from the house.

THE GARDENER.

[From the Gardener's Magazine.]

The Results of an instance of growing the Cucumber and the Melon in [Heath Mould or] Bog Earth. By Mr.* JAMES FIGGANS.

Sir,—I put up my frames in February with dung in the usual way; and it occurred to me to try a two-light frame with bog earth [heath mould,] which I had never seen done, anticipating, however, but little the result. When the bed was made up, I put nine inches of bog earth, as taken from the field, into it, and when the heat had arisen, I drew the earth into two heaps, one under each light, to receive the plants, and then introduced a little more earth into the frame. I put plants of cucumber under one light, and of melon under the other. The plants, both of cucumber and melon, ran very fast, and were very strong, and both produced a very fine crop; but I did not pay any particular attention to the number of fruit. As I possessed one seed of cucumber, which I had received as a very fine kind, and which I was, in consequence, anxious to propagate, I introduced it into the side of the heap upon which were the other cucumber plants, to which I applied my knife freely when the plant from the one seed began to run. At the same time I planted in the heap under the other light, one seed of the King William melon; and when the plants from these two seeds began to meet, I used the knife to the plant of the melon until I had left but one vine, upon which I had one melon of 9 lbs. weight. Of the produce of the cucumber seed I annex you a list :—

Number.	Length.	Circumference.
1.	14 in.	11 in.
2.	21	10½
3.	19	10¼
4.	18	10
5.	18	10¼
6.	18	10
7.	18½	10¼
8.	19½	9¼
9.	18	9
10.	18	9
11.	17	17
12.	17	8
13.	16	8½
14.	15	8½
15.	14	8
16.	13	8
17.	14	8½
18.	13	7½
19.	10	7
20	8	7

The frame was only once lined with fresh dung, and that previously to these two seeds being put in. I found that the bog earth required more water by about one third. I propose continuing the use of the bog earth this season, and, if agreeable to you, will communicate the result. I ought to mention that the fruit was of a good quality. I am, Sir, yours, &c.

JAMES FIGGANS.

*In another number, I have endeavored to show that the term bog earth would naturally imply that dense, sodden, coagulate, moorish soil which bogs, morasses, and swamps usually supply; and that the dry, mixedly sandy, easily separable mould met with on heaths, and in which the species of heath (*Erica*) delight to grow, would be far more appropriately denominated if termed heath mould.—*J. D.*

Observations on the Growth of Plants during different times of the day. By E. M. Meyer, Director of the Botanic Garden at Konigsberg, in Prussia.

To ascertain in what degree the different times of the day promote the growth of plants, M. Meyer, occasioned a scape of Amaryllis *Belladonna*, well known to grow very rapidly, to be measured thrice a day,—at six o'clock in the morning, twelve at noon, and six in the evening. The thermometer was also observed, and the results are exhibited together in a table. This table shows that the plant grew in the day almost twice as much as during the night, which M. Meyer ascribes to the influence of the light and warmth. He observes that the increase of the plant was proportional to the height of the temperature; but in what degree the light contributed to the growth could not be well ascertained. The entire deprivation of light would have lowered the temperature, and also injured the health of the plant, in which case the result of the observation could not be depended upon.

MISCELLANEOUS.

Communicated for the Farmer and Gardener.

SOAP—Potash, soda and amonia, are called alcalies; the two first fixed and the last a volatile alcali. Soda is obtained from the ashes of plants growing in or near the sea, and is hence called the marine alcali.

Amonia is the result of animal fermentation, and is consequently forming in great quanities under a great variety of circumstances, from many of which the most valuable manures are formed, but which unfortunately are lost as fast as formed from its volatile character and the ignorance of its nature and the modes of retaining and applying it.

Either of the alcalies, when combined with oil and water, form soap. Potash is the alcali used in soft soap, and soda forms hard soap. Soap formed by amonia is sometimes called volatile lineament.

The process of forming soap of any kind is founded on the fact, that an alcali has an attraction, both for water and oil, and hence unites these two opposing substances with itself and with each other.

If the alcali, oil and water are in a pure state, they always form a chemical union when brought in contact, and result in this useful article in domestic economy and personal cleanliness.

The cause of failures in soap making, is always some acid, salt or other foreign ingredient, mixed with one or more of the three substances requisite for the work. Carbonic acid, sometimes called fixed air, is perhaps the most common cause of failure in this useful domestic art. As the carbonic acid gas, exists at all times and in all places in the atmosphere, it readily, and almost necessarily combines with the potash contained in ashes, as they are produced by the process of combustion. Hence, the potash obtained from the leaching of ashes, is not a pure alcali, but a salt called by chemists, the carbonate of potash.

If newly burnt lime be mixed with the ashes while leaching, the carbonic acid leaves the potash and combines with the lime, making the carbonate of lime, and leaving the potash more nearly a pure alcali, and of course possessing a stonger attraction, both for water and oil. Hence the use of putting a little quick lime into leaching tubs with the ashes, or rather beneath the ashes.

The cause of failures in soap boiling is sometimes in the oil or grease; generally perhaps the salt mixed with it during the process of cooping or preserving. This may be removed by water; as salt is soluble in water, which does not combine with the oil by the simple process of boiling. Hence if the soap grease be largely charged with fresh water once boiled, before it is mixed with the other two ingredients for forming soap, it will be freed from its salt, and possibly a failure of success by that means prevented.

Although salt when combined with grease, frequently prevents the success of the soap boiler, in many manufactories it is used in large quantities in the making of soap. The two cases, however, are entirely distinct, and have no connexion with each other. When salt is used by soap boilers, it is for changing soft soap into hard soap; in other words to give soda the place of the potash in the soap already formed.

Salt is the muriate of soda, or muriatic acid and soda. The muriatic acid has a stronger attraction for potash, than for soda; consequently, when the salt is put into the soap containing potash, forming the muriate of potash in a liquid state, called waste ley; the salt and the soap hence change their partners, the one taking the potash, the other the soda; in other words, the muriatic acid takes the potash from the soap, and gives in exchange the soda, which forms soft soap into hard soap.

A NEGRO'S ANSWER.—A planter in St. Domingo was one day disposing of a horse to a neighbor, and being questioned by the purchaser regarding its qualities, among the rest whether it kicked, the disposer replied it was the quietest animal imaginable. He had, however, hardly used the expression when it flung up its heels, to the danger of the bystanders.—The purchaser, being irritated at the duplicity of the other, reproached him with his intended deception, when, to substantiate the peaceful character of the animal, he called one of his slaves, and demanded of him if he ever saw this horse kick before? "O, no, massa, smartly answered the negro, me never saw him kick before—always saw him kick behind."

LARGE OX.—On the last day of May, there was exposed to sale at Quebec, one of the finest oxen ever seen in Canada. The nett weight of the carcase, opened and stripped of the hide, was 1544 lbs.; the tallow weighing 198 lbs., and the hide 163 lbs.: gross weight when alive, 2324 lbs. This fine animal was seven years old, and was raised by K. Chandlier, Esq. of Nicolet near Quebec.

CONTENTS OF THIS NUMBER.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY.

	PER.	FROM	TO
BRANDY, Apple,	gallon.	$0 27	$—
Peach,	"	75	—
BEANS, white field,	bushel.	2 00	—
BEEF, on the hoof,	100lbs.	5 00	5 50
CORN, yellow,	bushel.	—	63
White,	"	65	66
COTTON, Virginia,	pound.	10	13
North Carolina,	"	11	13
Upland,	"	14	15
FEATHERS,	pound.	—	37
FLAXSEED,	bushel.	1 00	1 25
FLOUR—Best white wheat family,	barrel.	6 50	7 00
Do. do. baker's	"	6 00	6 50
Do. do. Superfine,	"	5 25	5 37
Super Howard street,	"	5 12	5 —
" " wagon price,	"	5 00	—75
City Mills, extra,	"	5 50	5 37
Do.	"	5 25	5 37
Susquehanna,	"	5 25	—
Rye,	"	3 37	—
GRASS SEEDS, red Clover,	bushel.	4 50	—
Timothy (herds of the north)	"	3 00	—
Orchard,	"	3 00	—
Tall meadow Oat,	"	2 50	—
Herds, or red top,	"	1 25	—
HAY, in bulk,	ton.	—	13 00
Pressed,	100 lbs	—	90
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
LIME,	bushel.	30	35
MUSTARD SEED, Foreign,	"	4 50	5 00
Domestic,	"	5 00	—
OATS,	"	30	32
OIL, linseed,	gallon.	—	90
Castor	"	1 70	1 80
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 00
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	3 00	—
Ground,	barrel.	1 37	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	62	—
TOBACCO, crop, common,	100 lbs	3 50	5 00
" brown and red,	"	4 50	6 00
" fine red,	"	6 00	8 00
" wrappery, suitable for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	13 00	17 00
" fine yellow,	"	15 00	22 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	4 00	—
Rappahannock,	"	3 00	4 00
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	1 06	1 12
Red,	"	95	1 05
WHISKEY, 1st pf. in bbls.	gallon.	28	29
" in hhds	"	26	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs.	1 75	—
To Wheeling,	"	1 50	—
		washed.	*unwash*
WOOL, Prime & Saxon Fleeces,	pound.	50 *to* 60	24 *to* 26
Full Merino,	"	40 50	20 24
Three fourths Merino,	"	33 40	22 24
One half do.	"	28 33	21 22
Common & one fourth Meri.	"	25 28	18 20
Pulled,	"	28 31	18 20

WOOL.

LYMAN REED & CO. Commission Merchants, No. 6 S. Charles street, Baltimore, Md.—devote particular attention to the sale of WOOL. All consignments made them will receive their particular attention, and liberal advances will be made when required. May 9.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	bushel.	$0 50	$—
BACON, hams,	pound.	11	—
Shoulders,	"	—	9
Middlings,	"	—	10
BUTTER, printed, in lbs. & half lbs.	"	31	—
Roll,	"	12	20
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	4 00	7 00
COWS, new milch,	"	15 00	27 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 62	1 75
CHOP RYE,	"	1 40	1 56
EGGS,	dozen.	9	—
FISH, Shad, trimmed	—	—	—
" salted,	barrel.	6 37	—
Herrings, salted, No. 1 & 2,	"	3 87	4 00
Mackerel, No. 1, 2 & 3,	"	4 12	7 00
Cod, salted,	cwt.	—	2 75
LAMBS, alive,	each.	1 25	2 00
Slaughtered,	quart'r	31	50
LARD,	pound.	8	—
ONIONS,	bushel.	—	73
POULTRY, Fowls,	dozen.	—	—
Chickens,	"	2 50	2 75
Ducks,	"	—	2 50
POTATOES, Irish,	bushel.	—	62
New,	peck.	—	—
VEAL, fore quarters,	pound.	7	—
Hind do.	"	8	—

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Note—I. I. H. has made arrangements for procuring for cash, Seed Grain of the very first quality, from some of the best farms in Maryland. aug. 12

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june 24

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